

REMARKS

Reconsideration of this application is respectfully requested. New claims 24, 25 and 26 have been added; claims 1 and 12 have been amended; and claims 19-23 have been canceled. As such, claims 1-18, and 24-26 are in this application and are presented for the Examiner's consideration in view of the following comments.

Claims 1-7, 10-12 and 15-18 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,781,463, issued July 14, 1998, to Ogawa et al. (*Ogawa*). Applicant respectfully disagrees. However, in the interests of furthering prosecution, Applicant has amended independent claims 1 and 12 to make clear Applicant's invention.

In particular, Applicant's claim 1 and claim 12 now clearly require that the nearest element decision device (claim 1) or slicer (claim 12) provide an output signal comprising "permissible symbol values of a symbol constellation used in transmission". As such, Applicant's claims 1 and 12 require a combination not described in, nor suggested by, *Ogawa*.

Applicant notes that the Examiner asserts that the second slicer 30 of *Ogawa* creates a decision device output signal containing permissible symbol values. This is simply wrong. In this regard, Applicant notes that the Examiner points to col. 16, Ins. 45-58 of *Ogawa*, which is reproduced below.

When the training sequence error value $e_{ref}(n)$ is smaller than the predetermined allowable error amount, the slicer 30 outputs a logic signal "1"; otherwise, it outputs a logic signal "0".

Ogawa, col. 16, Ins. 1-6, emphasis added.

However, as is clearly seen from the above, slicer 30 of *Ogawa* is not providing permissible symbol values - but merely logical indicators as to the size of the error value $e_{ref}(n)$. Further, the Examiner's position that a logical value is now a "permissible symbol value" as claimed is without support. One skilled in the art would understand a permissible symbol value to refer to a constellation of possible transmitted symbol values. Applicant respectfully points out that the term "permissible symbol values" has a clear meaning, e.g., see Applicant's specification, p. 7, Ins. 12-14, with respect to an

illustrative Vestigial Sideband (VSB) constellation. In addition, Applicant's independent claims 1 and 12 now particularly require that the permissible symbols be taken from a constellation of symbols used in transmission of a signal.

In view of the above, Applicant respectfully submit that independent claims 1 and 12, along with their respective dependent claims 2-7, 10, 11, and 15-18 are patentable over *Ogawa*.

Claims 8, 13, 19 and 21-23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Ogawa* in view of U.S. Patent No. 6,515,713, issued February 4, 2003, to Nam (*Nam*). Applicant respectfully traverses this rejection for claims 8 and 13 for the reasons described above with respect to independent claims 1 and 12. In the interests of furthering prosecution, claims 19 and 21-23 have been canceled.

Claims 9 and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Ogawa* in view of U.S. Patent No. 4,697,265, issued September 29, 1987, to Nozue (*Nozue*). Applicant respectfully traverses this rejection for the reasons described above with respect to independent claims 1 and 12.

Claim 20 has been rejected under 35 U.S.C. §103(a) as being unpatentable over *Ogawa* in view of *Nam* and further in view of *Nozue*. In the interests of furthering prosecution, claim 20 has been canceled.

In terms of the newly added claims 24-26, Applicant respectfully submits that these claims are also patentable over the cited art. For example, new independent claim 24 is not described in, or suggested by, *Ogawa* for reasons similar to those found in Applicant's independent claim 1. In particular claim 24 requires that the slicer provide a sequence of symbols **taken from a constellation of possible transmitted symbols**.


As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone Applicant's attorney in order to overcome any additional objections that the Examiner might have.

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If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 07-0832 therefor.

Respectfully submitted
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